APPENDIX G

RESULTS AND CHAIN-OF-CUSTODY FORMS FOR SUBSTRATE UTILIZATION STUDY AND THEORETICAL ACETATE REQUIREMENT CALCULATIONS

THEORETICAL ACETATE REQUIREMENT CALCULATIONS

Equations for reactions of acetate ($C_2H_3O_2^-$) with competing electron acceptors oxygen (O_2), nitrate (NO_3^-) and ClO_4^- are as follows [Coates, J. D. et. al. 2000. The diverse microbiology of (per)chlorate reduction. pp 257-270 *In*: E.T. Urbansky (ed.) Perchlorate in the Environment. *Environmental Science Research*, Vol. 57. Kluwer Academic/Plenum: New York]:

1) $CH_3COO^- + ClO_4^- \rightarrow 2\ HCO_3^- + H^+ + Cl^-$

2) $5\ CH_3COO^- + 8\ NO_3^- + 3\ H^+ \rightarrow 10\ HCO_3^- + 4\ H_2O + 4\ N_2$

3) $CH_3COO^- + 2\ O_2 \rightarrow 2\ HCO_3^- + H^+$

Based on influent [ClO_4-] of 10 mg/L, influent [NO_3^-] of 50 mg/L, and influent [O_2] of 8 mg/L, acetate (abbreviated Ac^- here) requirements are as follows:

1) 10 mg/L ClO_4^-/L x 1 mmol Ac-/1mmol ClO_4^- x 59 mg Ac-/mmolAc- x 1 mmol ClO_4-/99.5 mg ClO_4- = <u>5.9 mg Ac-/L</u>

Where 59 mg and 99.5 mg are the molecular weights of 1 mmol of acetate and ClO_4^-, respectively.

2) 50 mg NO_3^-/L x 1 mmol NO_3^-/62 mg NO_3^- x 5 mmol Ac^-/8 mmol NO_3^- x 59 mg Ac^- /1 mmol Ac^- = <u>29.7 mg Ac^-/L</u>

Where 62 mg is the molecular weight of 1 mmol of NO_3^-.

3) 8 mg O_2/L x 1 mmol O_2/32 mg O_2 X 1 mmol Ac^-/2 mmol O_2 x 59 mg Ac^-/1 mmol Ac- = <u>7.4 mg Ac^-/L</u>

Where 32 mg is the molecular weight of 1 mmol of O_2.

The total theoretical Ac- requirement based on the above-listed concentrations of electron acceptors is thus 5.9 mg/L + 29.3 mg/L + 7.4 mg/L = <u>42.6 mg/L.</u>

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EPA 8015B - Methanol

Client:	Center for Env. Microbiology	Date Sampled:	04/03/03
Project:	Acenol Study	Date Received:	04/04/03
Job No.:	22108	Date Analyzed:	04/07/03
Matrix:	Water	Batch Number:	GC28015W0226
Analyst:	TPW		

	Detection Limit	**Methanol**
Sample ID	mg/L	mg/L
Method Blank	1.0	ND
7-1-0	1.0	ND
7-2-0	1.0	ND
8-1-0	1.0	**28**
8-2-0	1.0	**30**
9-1-0	1.0	**59**
9-2-0	1.0	**61**
10-1-0	1.0	**110**
10-2-0	1.0	**77**
11-1-0	1.0	**160**
11-2-0	1.0	**140**
12-1-0	1.0	**200**
12-2-0	1.0	**140**
7-1-24	1.0	ND
7-2-24	1.0	ND
8-1-24	1.0	**26**
8-2-24	1.0	**29**

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Analytical
Laboratories, Inc.

EPA 8015B - Methanol

Client:	Center for Env. Microbiology	Date Sampled:	04/03/03
Project:	Acenol Study	Date Received:	04/04/03
Job No.:	22108	Date Analyzed:	04/07/03
Matrix:	Water	Batch Number:	GC28015W0227
Analyst:	TPW		

	Detection Limit	Methanol
Sample ID	mg/L	mg/L
Method Blank	1.0	ND
9-1-24	1.0	ND
9-2-24	1.0	1.9
10-1-24	1.0	120
10-2-24	1.0	100
11-1-24	1.0	150
11-2-24	1.0	130
12-1-24	1.0	220
12-2-24	1.0	180

Centrum Analytical Laboratories, Inc.

Methanol by EPA 8015B

Client:	Center for Env. Microbiology	Date Sampled:	04/03/03
Project:	Acenol Study	Date Received:	05/12/03
Job No.:	22307	Date Analyzed:	05/12-15/03
Matrix:	Water	Batch Number:	GC28015W0236
Analyst:	TPW		GC28015W0237
			GC28015W0238
			GC28015W0239

	Reporting Limit	Methanol
Sample ID	mg/L	mg/L
Method Blank	1.0	ND
7-1-4	1.0	ND
7-2-4	1.0	ND
8-1-4	1.0	26
8-2-4	1.0	28
9-1-4	1.0	46
9-2-4	1.0	55
10-1-4	1.0	120
10-2-4	1.0	98
11-1-4	1.0	150
11-2-4	1.0	110
12-1-4	1.0	210
12-2-4	1.0	180
7-1-8	1.0	ND
7-2-8	1.0	ND
8-1-8	1.0	26
8-2-8	1.0	13
9-1-8	1.0	45
9-2-8	1.0	50
10-1-8	1.0	110
10-2-8	1.0	87

Centrum Analytical Laboratories, Inc.

Methanol by EPA 8015B

Client:	Center for Env. Microbiology	Date Sampled:	04/03/03
Project:	Acenol Study	Date Received:	05/12/03
Job No.:	22307	Date Analyzed:	05/12-15/03
Matrix:	Water	Batch Number:	GC28015W0236
Analyst:	TPW		GC28015W0237
			GC28015W0238
			GC28015W0239

	Reporting Limit	**Methanol**
Sample ID	mg/L	mg/L
Method Blank	1.0	ND
11-1-8	1.0	**140**
11-2-8	1.0	**150**
12-1-8	1.0	**220**
12-2-8	1.0	**150**
7-1-12	1.0	ND
7-2-12	1.0	ND
8-1-12	1.0	**25**
8-2-12	1.0	**24**
9-1-12	1.0	**51**
9-2-12	1.0	**36**
10-1-12	1.0	**77**
10-2-12	1.0	**100**
11-1-12	1.0	**96**
11-2-12	1.0	**150**
12-1-12	1.0	**200**
12-2-12	1.0	**210**
7-1-16	1.0	ND
7-2-16	1.0	ND
8-1-16	1.0	**22**
8-2-16	1.0	**22**

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Laboratories, Inc.

Methanol by EPA 8015B

Client:	Center for Env. Microbiology	Date Sampled:	04/03/03
Project:	Acenol Study	Date Received:	05/12/03
Job No.:	22307	Date Analyzed:	05/12-15/03
Matrix:	Water	Batch Number:	GC28015W0236
Analyst:	TPW		GC28015W0237
			GC28015W0238
			GC28015W0239

	Reporting Limit	**Methanol**
Sample ID	mg/L	mg/L
Method Blank	1.0	ND
9-1-16	1.0	**52**
9-2-16	1.0	**37**
10-1-16	1.0	**75**
10-2-16	1.0	**60**
11-1-16	1.0	**96**
11-2-16	1.0	**120**
12-1-16	1.0	**160**
12-2-16	1.0	**180**
7-1-20	1.0	ND
7-2-20	1.0	ND
8-1-20	1.0	**19**
8-2-20	1.0	**28**
9-1-20	1.0	**53**
9-2-20	1.0	**41**
10-1-20	1.0	**98**
10-2-20	1.0	**110**
11-1-20	1.0	**140**
11-2-20	1.0	**120**
12-1-20	1.0	**130**
12-2-20	1.0	**170**

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Chain of Custody Record

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Fax: 909.779.0344

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Signal Hill, CA 90755
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Fax: 562.498.8617

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ACENOL STUDY

Page ____ of ____

Project No:	Project Name:
Project Manager:	Phone: Fax:
Client Name: (Report and Billing)	Address: (Report and Billing)

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type

Please Circle Analyses Requested

8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664		GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr		

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☐ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

Remarks/Special Instructions

1) Relinquished by: (Sampler's Signature)	Date:	Time:	3) Relinquished by:	Date:	Time:
2) Received by:	Date:	Time:	4) Received by:	Date:	Time:
			5) Relinquished by:	Date:	Time:
			6) Received for Laboratory by:	Date:	Time:

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

To be completed by Laboratory personnel:

Samples chilled? ☐ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☐ No

All sample containers intact? ☐ Yes ☐ No

☐ Courier ☐ UPS/Fed Ex ☐ Hand carried

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal

Laboratory Notes:

Sample Locator No.

White Copy - Original (Accompanies Samples) Yellow Copy - Centrum Files Pink Copy - Centrum duplicate Gold Copy - Client Copy

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Chain of Custody Record

Centrum Job #

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ACENOL STUDY

Page _____ of _____

Project No: [illegible] FWENC

Project Name: [illegible]

Project Manager: [illegible]

Phone:

Fax:

Client Name: (Report and Billing)

Address: (Report and Billing)

Please Circle Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type

8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664		GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr	

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☒ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

Remarks/Special Instructions

1) Relinquished by: (Sampler's Signature)	Date:	Time:	3) Relinquished by:	Date:	Time:
2) Received by:	Date:	Time:	4) Received by:	Date:	Time:
			5) Relinquished by:	Date:	Time:
			6) Received for Laboratory by:	Date:	Time:

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

To be completed by Laboratory personnel:

Samples chilled? ☒ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☒ No

All sample containers intact? ☐ Yes ☐ No

☐ Courier ☐ UPS/Fed Ex ☐ Hand carried

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☒ Lab disposal

Laboratory Notes:

Sample Locator No.

White Copy - Original (Accompanies Samples) Yellow Copy - Centrum Files Pink Copy - Centrum duplicate Gold Copy - Client Copy

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ALENOL STUDY

Page ___ of ___

Project No:	Project Name:

Project Manager:	Phone:	Fax:

Client Name: (Report and Billing)	Address: (Report and Billing)

Please Circle Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664		GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr		Remarks/Special Instructions
											X											
											X											
											X											
											X											
											X											

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☒ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

1) Relinquished by: (Sampler's Signature)	Date:	Time:	3) Relinquished by:	Date:	Time:
2) Received by:	Date:	Time:	4) Received by:	Date:	Time:
			5) Relinquished by:	Date:	Time:
			6) Received for Laboratory by:	Date:	Time:

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

To be completed by Laboratory personnel:

Samples chilled? ☒ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☒ No

All sample containers intact? ☒ Yes ☐ No

☐ Courier ☐ UPS/Fed Ex ☐ Hand carried

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal

Laboratory Notes:

Sample Locator No.

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v6.0 1/01 coc-temp-batch.xls

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Chain of Custody Record

Centrum Job #

Project No:	Project Name:
FWLNG	
Project Manager:	**Phone:** / **Fax:**
MILES	
Client Name: (Report and Billing)	**Address:** (Report and Billing)
CCTM	

Please Circle Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664	GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr		Remarks/Special Instructions
	7-1-4	4-3		W						X											
	7-2-4									X											
	8-1-4									X											
	8-2-4									X											
	9-1-4									X											
	9-2-4									X											
	10-1-4									X											
	10-2-4									X											
	11-1-4									X											
	11-2-4	V		V						X											

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☐ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

1) Relinquished by: (Sampler's Signature)	Date:	Time:	3) Relinquished by:	Date:	Time:
EM					
2) Received by:	Date:	Time:	4) Received by:	Date:	Time:
			5) Relinquished by:	Date:	Time:
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.			6) Received for Laboratory by:	Date:	Time:

To be completed by Laboratory personnel:

Samples chilled? ☐ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☐ No

All sample containers intact? ☐ Yes ☐ No

☐ Courier ☐ UPS/Fed Ex ☐ Hand carried

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal

Laboratory Notes:

Sample Locator No.

White Copy - Original (Accompanies Samples) Yellow Copy - Centrum Files Pink Copy - Centrum duplicate Gold Copy - Client Copy

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Chain of Custody Record

Centrum Job #

Project No:	Project Name:
TDEC	ACCNL STUDY
Project Manager:	**Phone:** / **Fax:**
WLS	
Client Name: (Report and Billing)	**Address:** (Report and Billing)
CCM	

Please Circle Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664		GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr	
11	12-1-4	4/2		W							X										
	12-2-4										X										
	7-1-3										X										
	7-2-3										X										
	4-1-3										X										
	3-2-3										X										
	9-1-3										X										
	9-2-3										X										
	11-1-3										X										
	12-2-3										X										

	Date:	Time:		Date:	Time:
1) Relinquished by: (Sampler's Signature) RCM			3) Relinquished by:		
2) Received by:			4) Received by:		
			5) Relinquished by:		
			6) Received for Laboratory by:		

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

To be completed by Laboratory personnel:

Samples chilled? ☑ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☐ No

All sample containers intact? ☐ Yes ☐ No

☐ Courier ☐ UPS/Fed Ex ☐ Hand carried

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☐ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

Remarks/Special Instructions

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal

Laboratory Notes:

Sample Locator No.

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Chain of Custody Record

Centrum Job #

Project No:	Project Name:
FWENC	ACME S.M.V
Project Manager:	**Phone:** / **Fax:**
M. Lisi	
Client Name: (Report and Billing)	**Address:** (Report and Billing)
CTI	

Please Circle Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664		GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Peat/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr	
	11-1-X	4/3		W							X										
	11-2-X										X										
	12-1-X										X										
	12-2-X										X										
	1-1-12										X										
	7-2-12										X										
	8-1-12										X										
	1-2-12										X										
	1-1-12										X										
	1-2-12										X										

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☑ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

Remarks/Special Instructions

1) Relinquished by: (Sampler's Signature)	Date:	Time:	3) Relinquished by:
2) Received by:	Date:	Time:	4) Received by:
			5) Relinquished by:
			6) Received for Laboratory by:

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

To be completed by Laboratory personnel:

Samples chilled? ☐ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☐ No

All sample containers intact? ☐ Yes ☐ No

☐ Courier ☐ UPS/Fed Ex ☐ Hand carried

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal

Laboratory Notes:

Sample Locator No.

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Voice: 562.498.7005
Fax: 562.498.8617

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Chain of Custody Record

Centrum Job #

Project No:	Project Name:
Project Manager:	**Phone:** / **Fax:**
Client Name: (Report and Billing)	**Address:** (Report and Billing)

Please Circle Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664		GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr	
	10-1-12	4/2		W							X										
	10-2-12										X										
	11-1-12										X										
	11-2-12										X										
	12-1-12										X										
	1-2-12										X										
	7-1-12										X										
	7-2-12										X										
	8-1-12										X										
	8-2-12										X										

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☐ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

Remarks/Special Instructions

	Date:	Time:
1) Relinquished by: (Sampler's Signature)		
2) Received by:		
3) Relinquished by:		
4) Received by:		
5) Relinquished by:		
6) Received for Laboratory by:		

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

To be completed by Laboratory personnel:

Samples chilled? ☐ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☐ No

All sample containers intact? ☐ Yes ☐ No

☐ Courier ☐ UPS/Fed Ex ☐ Hand carried

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal

Laboratory Notes:

Sample Locator No.

Centrum Analytical Laboratories, Inc.

1401 Research Park Drive, Suite 100
Riverside, CA 92507
Voice: 909.779.0310 ● 800.798.9336
Fax: 909.779.0344

3299 Hill Street, Suite 305
Signal Hill, CA 90755
Voice: 562.498.7005
Fax: 562.498.8617

www.centrum-labs.com lab@centrum-labs.com

Chain of Custody Record

Centrum Job #

Project No:	Project Name:
ENERG	ACTUAL STUDY
Project Manager:	**Phone:** / **Fax:**
Client Name: (Report and Billing)	**Address:** (Report and Billing)
(CM)	

Please Circle Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664	GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr		Remarks/Special Instructions
11	9-1-16	9/2		W						X											
12	9-2-16									X											
13	10-1-16									X											
14	10-2-16									X											
15	11-1-16									X											
16	11-2-16									X											
17	12-1-16									X											
18	12-2-16									X											
19	7-1-20									X											
20	7-2-20									X											

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☑ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

1) Relinquished by: (Sampler's Signature)	Date:	Time:	3) Relinquished by:	Date:	Time:
DEM					
2) Received by:	Date:	Time:	4) Received by:	Date:	Time:
			5) Relinquished by:	Date:	Time:
			6) Received for Laboratory by:	Date:	Time:

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

To be completed by Laboratory personnel:

Samples chilled? ☑ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☐ No

All sample containers intact? ☐ Yes ☐ No

☐ Courier ☐ UPS/Fed Ex ☐ Hand carried

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal

Laboratory Notes:

Sample Locator No.

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Fax: 562.498.8617

www.centrum-labs.com lab@centrum-labs.com

Chain of Custody Record

Centrum Job #

Project No: DENC.	**Project Name:** HONDA Study
Project Manager: M. Last	**Phone:** **Fax:**
Client Name: (Report and Billing) CEN	**Address:** (Report and Billing)

Please Circle Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MtBE Only	418.1 (TRPH), 413.2, 1664	GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MtBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB		Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr		Remarks/Special Instructions
	7-1-20	7/3		W																	
	7-2-20																				
	9-1-20																				
	9-2-20																				
	10-1-20																				
	10-2-20																				
	11-1-20																				
	11-2-20																				
	12-1-20																				
	12-2-20	V		V																	

Turn-Around Time

- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☑ Normal TAT

*Requires PRIOR approval, additional charges apply

Requested due date: _____

Remarks/Special Instructions

	Date:	Time:		Date:	Time:
1) Relinquished by: (Sampler's Signature)			3) Relinquished by:		
2) Received by:			4) Received by:		
			5) Relinquished by:		
			6) Received for Laboratory by:		

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

To be completed by Laboratory personnel:

Samples chilled? ☑ Yes ☐ No ☐ From Field

Custody seals? ☐ Yes ☑ No

All sample containers intact? ☐ Yes ☐ No

☐ Courier ☐ UPS/Fed Ex ☐ Hand carried

Sample Disposal

- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal

Laboratory Notes:

Sample Locator No.